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10/717,363	11/19/2003	Robert Fischer	071308.0487	7747

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EXAMINER

TROST IV, WILLIAM GEORGE

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/717,363

Applicant(s)

FISCHER ET AL.

Examiner

Bobbak Safaipoor

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on November 19, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/19/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Information Disclosure Statement*

2. The information disclosure statement (IDS) filed on **11/19/2003** has been considered by the examiner and made of record in the application file.

### *Preliminary Amendment*

3. The Preliminary Amendment filed on **02/24/2004** is being considered by the examiner.

### *Drawings*

4. The drawings were received on **02/24/2004**. These drawings are accepted.
5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: On **figure 1, step 13**, reference number **13** is not mentioned in the description. A proposed drawing correction, corrected drawing, or amendment to the

specification to add the reference number in the description is required in reply to the present Office Action.

6. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office Action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the Examiner, the Applicant will be notified and informed of any required corrective action in the next Office Action. If a response to the present Office Action fails to include proper drawing corrections, corrected drawings or arguments therefor, the response can be held **NON-RESPONSIVE** and/or the application could be **ABANDONED** since the objections/corrections to the drawings are no longer held in abeyance.

### ***Specification***

7. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: **Receiver and method for scanning and receiving wake-up signals with multiple configurations.**

Appropriate correction is required.

### ***Claim Objections***

8. **Claim 1** is objected to because of the following informalities:

- a) On **line 4 of claim 1**, insert --:-- after “parameters”; and
- b) On **line 10 of claim 1**, replace “system” with --receiver-- after “the”.

9. **Claim 7** is objected to because of the following informality: the claim is dependent on claim 6 and refers to “step a) or b)”, while claim 6 is not a method claim and “a)” and “b)” are considered to be features or elements of the receiver claimed in 7.

For the purpose of examination the word “step” will be eliminated and prior art will be applied accordingly. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2631

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. **Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Rotzoll (U.S. Patent # 5,790,946).**

Consider **claim 1**, Rotzoll clearly discloses a method for receiving different wake-up signals(read as first signals and further signals, i.e. WAKE\_UP1, WAKE\_UP2, and WAKE\_UPX, figure 4), the wake-up signals differing in the transmission parameters: frequency, data rate, and modulation type (figure 4; column 1 line 65 - column 2 line 6, and column 5 lines 43-64) and comprising the steps of:

- a) In a first step in a sleep mode (read as quiescent mode) of the master receiver 25 (read as receiver) (figure 1), detection (receiving and searching) for a predetermined frequency, data rate and/or modulation type, (wake-up criterion) is performed (column 1 line 65 - column 2 line 6, column 4 line 65 - column 5 line 20), and using a first preset adjustable configuration of transmission parameters (i.e., MODE 1, MODE 2, MODE X); and
- b) By employing, for example, more than one data rate detector the wake up receiver 20 can switch the data rate to be detected from the wake up signal. When a change in necessary (read as no signal is received and no wake-up criterion is found) switch the receiver to "Mode X" (at least one further configuration) and detect a different data rate (read as wake-up criterion) using a different data rate detector (figures 1, 3 and 4; column 5 lines 11-14, and 40-50).

Consider **claim 2**, and **as applies to claim 1 above**, Rotzoll further discloses when a change in necessary (read as no signal is received and no wake-up criterion is found) switch to "Mode X" (at least one further configuration) and detect a different data rate (read as wake-up criterion) using a different data rate detector (wake-up criterion) to be detected from the wake up signal as in step a) (figures 1, 3 and 4; column 5 lines 11-14 and 40-50).

Consider **claim 3**, **as applied to claim to 1**, Rotzoll clearly discloses that upon detection of the signal using step a) or b) above, a wake-up signal is output that contains information about the data rate (read as given configuration) (figure 4; column 4 line 60 - column 5 line 15 and column 5 lines 40-50; "WAKE\_UP1, 2, X" contains information about the detected signal since they are clearly different signals as indicated).

Consider **claim 4**, and **as applies to claim 1 above**, Rotzoll further discloses a switch 30 for switching the master receiver 25 between its modes of operation in response to the arrival of a wake up signal. Upon detecting the "WAKE\_UP1, 2, X" (receiving successfully and finding a wake-up criterion), a mode change signal is generated to switch 30. Accordingly, switch 30 changes the mode of operation of master receiver 25 from sleep mode to active mode (receiver goes out of the quiescent mode into an active mode) (figure 1; column 2 line 66 - column 3 line 1, column 3 lines 4-6 and 32-34).

Consider **claim 6**, Rotzoll clearly discloses in figure 4, a receiver for receiving multiple wake-up signals (read as first and further signals i.e. WAKE\_UP1, WAKE\_UP2,

and WAKE\_UPX, figure 4) comprising a storage device (for loading at least two different pre-defined receiver configurations inherently taught by stating that the wake-up signal comprises a predetermined (implying storage of the values) frequency and a predetermined data rate) (column 1 line 58 - column 2 line 6) wherein,

a) the master receiver (read as receiver) has a sleep mode (read as quiescent mode) in which it intermittently receives a signal and compares it to a predetermined frequency and data rate(read as wake-up criterion) (column 1 line 65 - column 2 line 6) using a first preset adjustable configuration of transmission parameters (column 4 line 65 - column 5 line 20), and

b) the master receiver inherently comprises a logic switch (read as changeover switch) (figure 4), to select (read as switch) one of the other modes (MODE 1, 2, X) (read as configurations), when no signal is detected and no frequency and/or data rate (wake-up criterion) is found, and to search for a different data rate (wake-up criterion) (column 4 line 65 - column 5 line 20 and column 5 lines 43-64).

Consider **claim 7**, as applied to claim 6, Rotzoll clearly discloses that the master receiver goes into active mode or is awakened when detection (reception) is successful and a predetermined data rate (wake-up criterion) has been found by a) or b), using a mode (configuration) that was successful (figure 4; column 2 lines 2 – 6, column 4 lines 60-64 and column 5 lines 4-15 and 40-50).



***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. **Claims 5 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Rotzoll (U.S. Patent # 5,790,946)** in view of **Uber et al. (U.S. Patent # 4,633,515)**.

Consider **claim 5**, and **as applied to claim 1 above**, Rotzoll clearly discloses the claimed invention except for mentioning that receiving and detection of a wake up criterion must take place within a preset time.

In the same field of endeavor, Uber et al. clearly show and disclose an emergency broadcast alert detector having a radio receiver (reads as wake up receiver), this radio receiver (reads as wake up receiver) has the ability to scan among several predetermined frequencies. The radio receiver (reads as wake up receiver) has the task of scanning through the predetermined frequencies and finds an emergency broadcast alert. A noise detector is connected to the output of the radio receiver (reads as wake up receiver), and if the noise detected is indicative of no signal is present, the radio receiver (reads as wake up receiver) will continue to scan through the predetermined frequencies. Uber et al. clearly discloses upon detecting noise indicative of no signal is present for a preset time, the radio receiver (reads as wake up receiver) switch to the next predetermined frequency. In other words, if no signal is detected (reads as successfully detecting a wake-up criterion) within a preset time, the radio receiver (reads as wake up receiver) switch to a different predetermined frequency (figure 1; abstract; column 3 line 58 – column 4 line 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the timing scheme taught by Uber et al. into Rotzoll; such that when the communication device, as described by Rotzoll, did not receive a

Art Unit: 2631

wake up signal and can not detect any wake up criterion within a preset time, it switch to another mode (Rotzoll, figure 4) and try to receive the wake up signal and detect the wake up criterion, for the purpose of further reducing current draw.

Consider **claim 8**, and **as applied to claim 6**, Rotzoll clearly discloses when a change is necessary, a second, third... detection mode can be selected to detect the data rate; but fails to disclose the use of a time control unit in conjunction with a timing convention to determine when a change of detection mode is necessary.

In the same field of endeavor, Uber et al. clearly discloses an emergency broadcast alert detector having a radio receiver (reads as wake up receiver). Where the radio receiver (reads as wake up receiver) scans through multiple frequencies to look for an emergency broadcast (reads as wake up signal). They disclose the use of a 3.5 seconds oscillator in conjunction with a noise detector and a NAND-gate to switch one frequency to the next (abstract; figure 1; column 3 line 53 - column 4 line 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate the timing control unit of Uber et al. into Rotzoll for the purpose of using a timing convention in conjunction with a time control unit to wait for successfully receiving a wake up signal and detecting a wake up criterion before changing to another mode that is both simple to design and easy to implement; thus reducing the cost of manufacturing the device.

### ***Conclusion***

16. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

a) King et al., US-PGPUB 2003/0164774, System and method for remote pressure monitoring;

b) Kovach et al., US Patent # 6,369,530, Battery-Powered wireless remote-control motorized window covering assembly having controller components;

c) Small, US-PGPUB 2004/0203317, Wireless interactive doll-houses and playsets therefor;

d) Martin, US-PGPUB 2002/0036569, Tag and receiver systems;

e) Pearson et al., US-PGPUB 2005/0242923, Passive Entry Systems for Vehicles and other Applications;

f) McCarthy et al., US Patent # 6,041,240, Clear Channel Selection System for a Cordless Telephone.

17. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Hand-delivered responses** should be brought to

Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Art Unit: 2631

18. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bobbak Safaipour whose telephone number is (571) 270-1092. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm.


If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Perez-Gutierrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Bobbak Safaipour*  
B.S./bs

May 12, 2006

  
RAFAEL PEREZ-GUTIERREZ  
PRIMARY EXAMINER  
5/12/06